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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number	10/723,365
Filing Date	November 26, 2003
First Named Inventor	Van den Boom
Group Art Unit	1637
Examiner Name	WOOLWINE, SAMUEL C

Sheet 1 of 6

Attorney Docket No: SEQ-2073-UT

US PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1.	5,003,059	3/23/1991	Brennan	
	A2.	5,453,247	9/26/1995	Beavis et al.	
	A3.	5,864,137	1/26/1999	Becker and Young	
	A4.	5,932,451	08/1999	Wang et al.,	
	A5.	5,965,363	10/12/1999	Monforte et al	
	A6.	6,051,378	4/18/2000	Monforte et al	
	A7.	6,090,558	7/18/2000	Butler et al	
	A8.	6,104,028	8/15/2000	Hunter et al	
	A9.	6,111,251	8/29/2000	Hillenkamp	
	A10.	6,265,716	7/24/2001	Hunter et al	
	A11.	6,297,006	2/10/2001	Drmanac et al.	
	A12.	6,309,833	10/2001	Edman et al.	
	A13.	6,500,621	12/2002	Koster	
	A14.	6,558,902	5/6/2003	Hillenkemp	
	A15.	6,569,385	5/27/2003	Little and Koster	
	A16.	6,994,960	02/2006	Foote et al.	
	A17.	6,994,969	02/2006	Zabeau et al.	
	A18.	2002/0120127	8/29/2002	Church et al.	
	A19.	2003/0013099	1/16/2003	Lasek et al.	
	A20.	2003/0087235	05/2003	Darikee et al.	

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	A21.	2003/0180748	9/25/2003	Braun et al	
	A22.	2003/0180749	9/25/2003	Braun et al	
	A23.	2003/0190644	10/9/2003	Braun et al	
	A24.	2005/0026183	02/2005	Fan et al.,	
	A25.	2005/0089904	4/28/2005	Beaulieu et al	
	A26.	2005/0272070	12/8/2005	Mathias et al.	
	A27.	2006/0073501	4/6/2006	van den Boom et al	
	A28.	2006/0210992	9/21/2006	van den Boom et al	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ²
	A29.	EP 1179589	12/13/2002	F. Hoffman-LaRoche		
	A30.	EP 1197567	04/2002	Plaetinck et al.,		
	A31.	GB 2329475	8/6/1998			
	A32.	JP2003-245087	09/2003	Azumi et al		
	A33.	WO 00/22130	4/20/2000	Chiron Corp		
	A34.	WO 01/55455	8/2/2001	Millenium Pharm		

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	A35.	AKIYAMA, Y. et al., "Cell-Type-Specific Repression of the Maspin Gene Is Disrupted Frequently by Demethylation at the ..." Amer. J. of Pathology, 2003, 191:1-1919, 163, Japan	
	A36.	Badger et al., "New features and enhancements in the X-PLOR computer program", Proteins: Structure, Function, and Genetics, 35(1):25-33, (1999)	
	A37.	Baylin and Bestor, "Altered methylation patterns in cancer cell genomes: cause or consequence?" Cancer Cell. 2002 May;1(4):299-305	
	A38.	Blazewicz et al., "On some properties on DNA graphics," Discrete Applied	

EXAMINER

DATE CONSIDERED

Substitute Disclosure Statement Form (PTO-1449)

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Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Mathematics, Vol. 98, 1999, pp. 1-19	
	A39.	Blazewicz et al., "On the recognition of de Bruijn graphs and their induced subgraphs," Discrete Applied Mathematics, Vol. 245, 81-92 February 28, 2002	
	A40.	Buck et al., "Design Strategies and Performance of Custom DNA Sequencing Primers" BioTechniques. September 1999. 27:528-536	
	A41.	Caskey, C. T. et al., Science 256(5058): 784-789 (1992)	
	A42.	Chen et al., "Detection in fecal DNA of colon cancer specific methylation of the nonexpressed vimentin gene," J Natl Cancer Inst., 2005 Aug 3;97(15):1124-1132	
	A43.	Chung, M.H. et al., Mutat. Res., 254(1): 1-12, (1991)	
	A44.	COSTELLO, J. et al., "Methylation matters: a new spin on maspin" Nature Genetics, 2002, 123-124, 31 USA	
	A45.	Dahl, et al., "DNA methylation analysis techniques," Biogerontology, 2003, Vol., 4 pp 233-250; especially pp 242-245	
	A46.	De Noronha et al., (1992) PCR Methods and Applications, 2(2), p 131-136	
	A47.	Deng et al., Cancer Research, 1999, Vol. 59, pp. 2029-2033	
	A48.	EGLAND, K. et al., "Characterization of Overlapping XAGE-1 Transcripts Encoding a Cancer Testis Antigen Expressed in ..." Molecular Cancer Therapeutics, 2002, 441-450, USA	
	A49.	FUTSCHER, B. et al., "Aberrant Methylation of the Maspin Promoter is an Early Event in Human Breast Cancer" Neoplasia, 2004, 380-389, 6, USA	
	A50.	FUTSCHER, B., et al., "Role for DNA methylation in the control of cell type-specific maspin expression", Nature Genetics, 2002, 175-179, 31, USA	
	A51.	Genbank Accession AC005730	
	A52.	Genbank Accession AF021833	
	A53.	Genbank Accession AF096289	
	A54.	Genbank Accession AJ242973	
	A55.	Genbank Accession AW195104	
	A56.	Genbank Accession AW874187	
	A57.	Genbank Accession NM007202	
	A58.	Genbank Accession Number AF037439, Chatterjee et al. December 1997	
	A59.	Genbank Accession X86173	
	A60.	GERMER, Saren, et al, High-throughput SNP Allele-Frequency Determination In Pooled DNA Samples by Kinetic PCR, Methods, Genome Research, (2000). 258-266, 10, Cold Spring Harbor Laboratory Press.	
	A61.	Gunderson et al., "Mutation detection by ligation to complete n-mer DNA Arrays," Genome Res. 1998 Nov;8(11):1142-1153	
	A62.	HEIGHWAY, J. et al., "Expression profiling of primary non-small cell lung cancer for target identification", Oncogene, 2002, 7749-7763, 21, UK	
	A63.	HURTUBISE, A. et al., "Evaluation of antineoplastic action of 5-aza-	

EXAMINER

DATE CONSIDERED

Substitute Disclosure Statement Form (PTO-1449)
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		2rdeoxycytidine, (Dacogen) and docetaxel (Taxotere) on ..." Anti-Cancer Drugs, 2004. 161-1 67,15, Canada	
	A64.	Instrumentation; "Genesis 200/8" (200 cm with including an 8-tip arm) liquid handling systems; Tecan AG of Switzerland ("Tecan"), TECAN Products for Diagnostics and Life Science, located at http://www.tecan.ch/index.htm	
	A65.	Instrumentation; "Model CRS A 255" robot "Digital Servo Gripper" "Plate Cube" system. "lid parking station" "shaker" Robocon Labor-und Industrieroboter Ges.m.b.H of Austria ("Robocon")	
	A66.	Instrumentation; "Multimek 96" automated pipettor; Beckman Coulter, Inc. located at http://www.coulter.com , 09/08/99	
	A67.	Instrumentation; "Nano-Plotter" from GeSiM, Germany, located at http://www.gesim.de/np-intro.htm	
	A68.	Instrumentation; Bar code systems, including one and two dimensional bar codes, readable and readable/writable codes and systems; Datalogic S.p.A. of Italy ("Datalogic") located at http://www.datalogic.com	
	A69.	Instrumentation; DYNABEADS, streptavidin-coated magnetic beads; from Dynal, Inc. Great Neck, NY and Oslo Norway	
	A70.	Instrumentation; "MJ Microseal" plate sealer; Thermal Cycler Accessories: Sealing Options, Sealing Products, MJ Research, located at http://www.mjresearch.com/html/consumables/ealing/sealing_products.html	
	A71.	International Search Report for International Application No. PCT/US00/08111, Date of Mailing November 13, 2000.	
	A72.	International Search Report for International Application No. PCT/US005/32441 October 2, 2006.	
	A73.	Jurinke et al., "Detection of RET proto-oncogene codon 634 mutations using mass spectrometry", J. Mol. Med., 75:745-750, (1997)	
	A74.	Jurinke et al., (1998) Rapid Comm in Mass Spec., Vol. 12, p. 50-52	
	A75.	KIM, S. et al., "Maspin Expression Is Transactivated by P63 and Is Critical for the Modulation of Lung Cancer Progression" Cancer Research, 2004, 6900-6905, 64, Korea	
	A76.	Kirk, et al., "Single Nucleotide polymorphism seeking long term association with complex disease," Nucleic Acids Res. 2002, Vol. 30, No. 5, pp 3295-3311	
	A77.	Lindahl et al., Annu. Rev Biochem., 61:251-281 (1992)	
	A78.	LING, X. et al., "Proteomics-Based Identification of Maspin Differential Expression in Bronchial Epithelia Immortalized ..." Chinese J. of Cancer, 2003,463-466, 22, China	
	A79.	Liu, X. et al., "XAGE-1, A New Gene That Is Frequently Expressed in Eging's Sarcoma" Cancer Research, 2000, 4752-4755, 60, USA	
	A80.	MAASS, N. et al., "Decline in the expression of the serine proteinase inhibitor maspin is associated with tumour progression ..." J. of Pathology, 2001, 321-326,195, Germany	
	A81.	MAASS, N., et al., "Hypermethylation and histone deacetylation lead to silencing	

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		of the maspin gene in human breast cancer ..." BBRC, 2002, 125-128,297, USA	
	A82.	MOON, C. et al. "Aquaporin Expression in Human Lymphocytes and Dendritic Cells" American Journal of Hematology, 2004 128,-133, 75, USA	
	A83.	MOON, C. et al., "Involvement of aquaporins in colorectal carcinogenesis" Oncogene, 2003,6699-6703,22, USA	
	A84.	MURAKAMI, J. et al., "Effects of demethylating agent 5aza-2'deoxyctidine and histone deacetylase inhibitor FR901228 on maspin ..." Oral Oncology 2004,597-603,40, Japan	
	A85.	NCBI GenBank Accession Number: NM_002639	
	A86.	OGASAWARA, S. et al., "Disruption of cell-type-specific methylation at the Maspin gene promoter is frequently involved in ..." Oncogene, 2004, 11 17-1 124, 23, Japan	
	A87.	OSHIO, K. et al., "Aquaporin-1 expression in human glial tumors suggests a potential novel therapeutic target for tumor-associated ..." Acta Neurochir, 2003,494-502, 86, USA	
	A88.	RISCH, Neil, et al., The Relative Power of Family-Based and Case Control Design for Linkage Disequilibrium Studies of Complex Human Diseases I. DNA Pooling. Genome Research, (1998), 1278-1288, 8, Cold Spring Harbor Laboratory Press	
	A89.	SAADOUN, S. et al., "Increased aquaporin 1 water channel expression in human brain tumours", British J. of Cancer, 2002, 621-623,87, UK	
	A90.	Sakai et al., American Journal of Human Genetic, 1991 Vol. 48, pp. 880-888	
	A91.	SATO, N. et al. "Identification of maspin and S100P as novel hypomethylation targets in pancreatic cancer using global gene expression profiling", 2004, 1531-1538,23, USA	
	A92.	Sequenom Advances the Industrial Genomics Revolution with the Launch of Its DNA MassArray Automated Process Line, Press Release: Sept. 28, 1998, http://www.sequenom.com/pressrelease.htm .	
	A93.	Sequenom and Gemini Identify Genes Linked to Cardiovascular Disease, Press Release: Nov. 28, 2000, http://www.sequenom.com/ir/ir_prs.asp	
	A94.	Sequenom Announces Publication of Results From Large-Scale SNP Study With the National Cancer Institute, Press Release: Jan. 16, 2001, http://www.sequenom.com/ir/ir_prs.asp	
	A95.	Sequenom Completes Design of More Than 400,000 SNP Assays; Mass EXTENDTM Assay Portfolio Covers Majority of SNPs in the Public Domain, Press Release; Oct. 10, 2000, http://www.sequenom.com/ir/ir_prs.asp	
	A96.	Sequenom: Technologies and Tools, located at http://www.sequenom-san.com/tech/tools.html , dated 08/29/99	
	A97.	Sheng et al., "Tagged probe interval graphs," Journal of Combinatorial Optimization. 2001 Vol. 5, pp. 133-142	
	A98.	SIGALOTI, L. et al., "Cancer testis antigens expression in mesothelioma:role of DNA methylation ..." British J. of Cancer, 2002, 979-982, 86, UK	
	A99.	SMITH, S. et al., "Maspin-the most commonly-expressed gene of the 18q21.3	

EXAMINER

DATE CONSIDERED

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		serpin cluster in lung cancer ..." Oncogene, 2003, 8677-8687,22, UK	
	A100.	Stomakhin et al., "DNA sequence analysis by hybridization with oligonucleotides microchips;MALDI mass spectrometry identificaiton of 5mers contiguously stacked to microchip oligonucleotides," Nucleic Acids Res. 2000 Mar 1;28(5):1193-1198	
	A101.	Takenawa, J.et al., "Transcript Levels of Aquaporin 1 and Carbonic Anhydrase IV as Predictive indicators for Prognosis of Renel Cell. ..." Int. J. Cancer, 1998, 1-7, 79, Japan	
	A102.	Uracil-DNA Glycosylase (UDG), product description. New England Biolabs. http://circuit.neb.com/neb/products/mod_enzymes/280.html , (12/21/00)	
	A103.	Uracil-DNA Glycosylase, product description. Roche Molecular Biochemicals Catalog Version 3, Nov. 1999 http://biochem.roche.com/pack-insert/1269062a.pdf , (12/21/00)	
	A104.	VACCA, A. et al., "Microvessel overexprssion of aquaporin 1 parallels bone marrow angiogenesis in patients with active ..." British J. of Haematology, 2001,415-421,113, Italy	
	A105.	Wada et al., "Detection of Single-nucleotide Mutations Including Substitutions and Deletions by Matrix-assisted Laser Desorption/Ionization Time-of-flight Mass Spectrometry," Rapid Communications in Mass Spectrometry, 11:1657-1660, (1997)	
	A106.	WADA, K. et al., "Aberrant Expression of the Maspin Gene Associated,with Epigenetic Modification," J. Invest Dermatol, 2004, 805-811, 122, Japan	
	A107.	Xiong et al., "COBRA: a sensitive and quantitative DNA methylation assay," Nucleic Acids Res. 1997 Jun 15;25(12):2532-2534	
	A108.	YATABE, Y. et al., "Maspin expression in normal lung and non-small-cell lung cancers: cellular property ..." Oncogene, 2004,4041-4049, 23, Japan	
	A109.	ZENDMAN, A. et al., "The XAGE Family of Cancer/Testis-Associated Genes: Alignment and Expression Profile in Normal Tissues ..." Int. J. Cancer, 2002,361-369,99 Netherlands	
	A110.	Zhu et a., "Use of DNA Methylation for cancer detection and molecular classification," J Biochem Mol Biol. 2007 Mar 31;40(2):135-141	
	A111.	Zou et al., "Maspin, a serpin with tumor-suppressing activity in human mammary epithelial cells," Science, 1994 Jan 28;263(5146):526-529	

EXAMINER /Samuel Woolwine/

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